**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 2**
**CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION**

**DATE:** DEC 21 2016

**SUBJECT:** **Follow-Up to Citizen Complaint**
**Tallaboa Encarnación Community**
**Peñuelas, Puerto Rico**

**FROM:** Yolianne Maclay, P.E., Environmental Engineer YMaclay 12/21/16
Multimedia Permits and Compliance Branch

12/21/16
Alex O. Rivera, E.I.T. Environmental Engineer
Multimedia Permits and Compliance Branch

**THRU:** for Nancy Rodríguez, P.E., Chief
Multimedia Permits and Compliance Branch

**TO:** Citizen Complaint File

On December 15, 2016, the United States Environmental Protection Agency (EPA) Region 2's Inspectors Yolianne Maclay and Alex O. Rivera (Inspectors) conducted a Reconnaissance Inspection (RI) in the Tallaboa Encarnación Community (Community) located in Peñuelas, Puerto Rico.[1] Mr. Mervin Rodríguez and Ms. Gisselit Madera, Rangers from the Puerto Rico Department of Natural and Environmental Resources (DNER), also participated in the RI.[2] The RI was performed in response to a citizen complaint submitted to EPA on December 5, 2016, by "Comité Pro Salud, Desarrollo y Ambiente de Tallaboa," a community-based organization (Complainant). In summary, the Complainant alleged that sediments containing Coal Combustion Residuals ("CCR" or "Ashes") deposited at the Ecosystems Landfill reached the creek and areas of the Community (e.i. property used for growing plantains). Also the Complainant alleged that runoff containing sediments caused flooding at the Community. Refer to **Attachment I** for a copy of the citizen complaint, and attachments provided thereto.

The findings and observations of the RI are discussed in **Attachment II**. The EPA Inspector Maclay took photographs DSCN0223 thru DSCN0302 during the RI using an EPA-owned digital camera Nikon Coolpix P530, Model Number 31106100. **Attachment III** of this Report includes the RI photo-documentation, which provides additional descriptions, findings, comments, and observations.[3] **Attachment IV** of this Report includes location maps of the areas described in this Report.

Attachment I – Citizen Complaint Documents
Attachment II – RI Findings and Observations
Attachment III – RI Photo-Documentation
Attachment IV - Location Maps

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[1] The RI was performed pursuant to the authority in Section 308(a) of the Clean Water Act (the "Act"). The RI began approximately at 12:52 p.m. and ended approximately at 4:15 p.m., local time. Sunny skies and dry-weather prevailed during the RI.
[2] The Rangers Rodríguez and Madera work for DNER's Regional Office located in the Municipality of Ponce and can be contacted at (787) 844-3225.
[3] The RI Photo-documentation includes photographs DSCN0226, DSCN0232, DSCN0235, DSCN0240, DSCN0247, DSCN0262, DSCN0267, DSCN0282, DSCN0295, and DSCN0301. The rest of the photographs taken were saved in a DVD and placed in the Citizen Complaint File.

# Attachment I

18 de septiembre de 2014

Sr. José Cedeño Maldonado
Oficial Sección de Regulaciones
Cuerpo de Ingenieros del Ejército de los Estados Unidos

Ref: Impacto proyecto Ecosystems en quebrada Bo. Tallaboa Encarnación, Peñuelas.

Sr. Cedeño:

Traemos a su atención nuestra preocupación por el impacto que ha sufrido una quebrada intermitente la cual discurre a través de nuestra comunidad, por la construcción del vertedero Ecosystems, aguas arriba de la quebrada mencionada. Dicha quebrada durante las pasadas lluvias de agosto y del corriente mes generó una cantidad inusual de sedimento y de inundaciones en nuestra comunidad.

Ante la sospecha de que las mismas fueron ocasionadas por la construcción del vertedero de Ecosystems nos dimos a la tarea de levantar evidencia fotográfica la cual queremos compartir con usted para que a ciencia cierta saber si dicho proyecto de construcción está en violación con los estatutos de la agencia que usted representa.

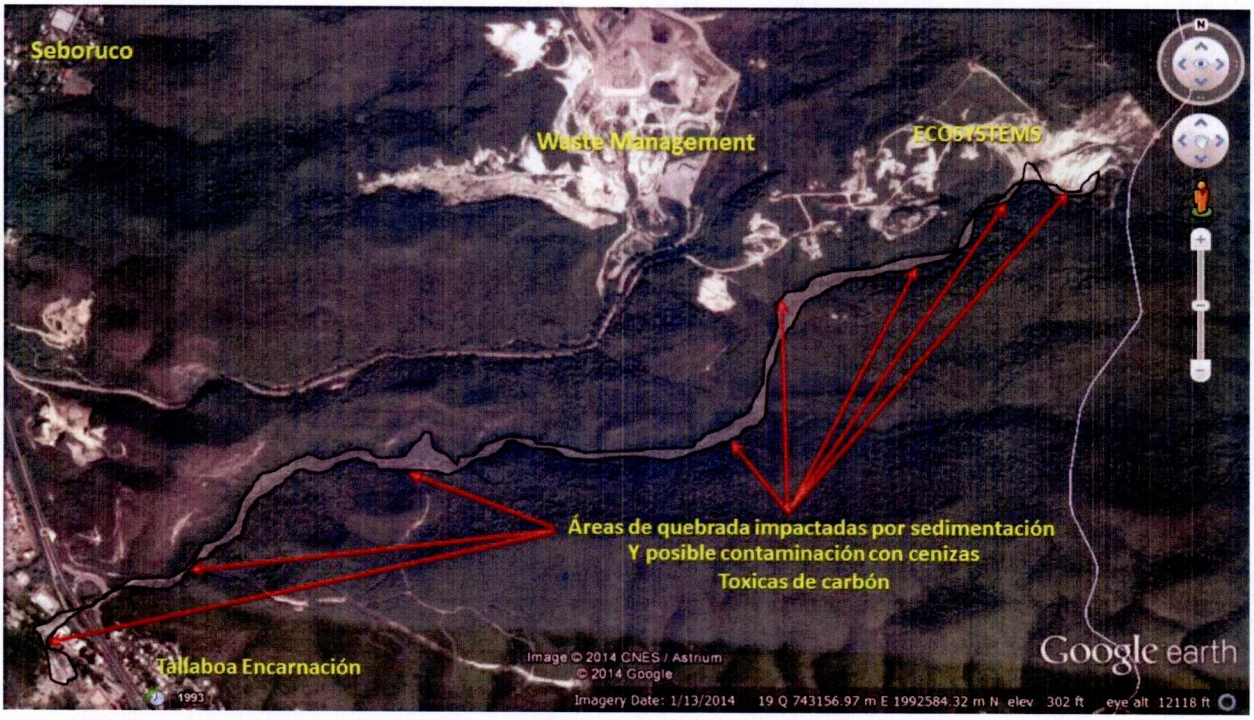
Nos preocupa mucho que el impacto del proyecto Ecosystems a la quebrada pueda generar un problema aún mayor de inundaciones dado a que estamos en plena época de huracanes, en adición a que sospechamos que los sedimentos que dicha quebrada a depositado en nuestra comunidad contengan cenizas toxicas de carbón, las cuales están siendo utilizadas como parte de la construcción del proyecto.

Esperando su pronta atención, quedo.

José Manuel Diaz Pérez
Comité Pro Salud Desarrollo y Ambiente de Tallaboa
Peñuelas, PR.
Tel. (787) 603-3983
Email: manoloseus@gmail.com

CC. Deborah Cedeño Maldonado – USCE

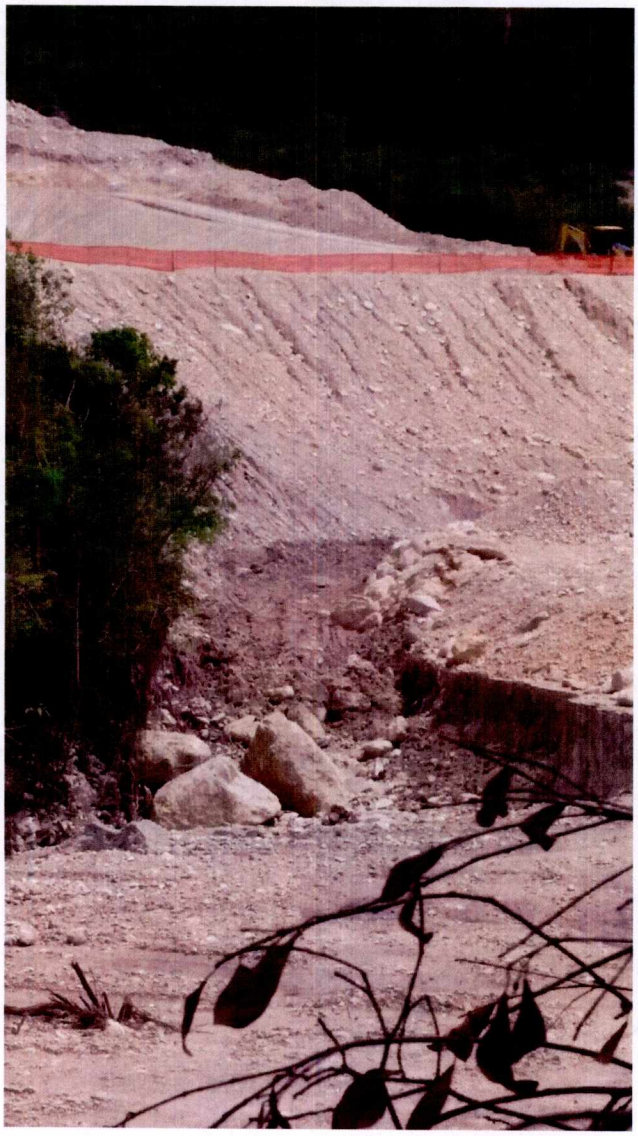
# ANEJOS




Áreas impactadas de la quebrada por la construcción de Ecosystems

# Fotos aéreas impacto en quebrada

# Impacto de construcción en quebrada Tallaboa



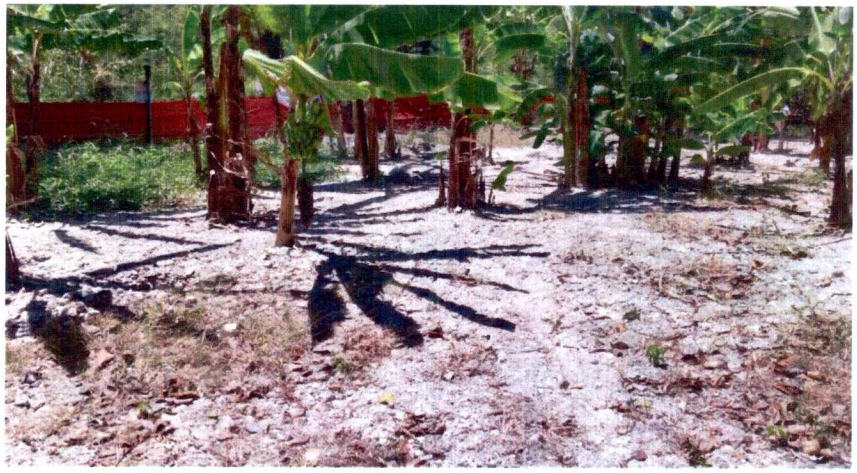
Cause de quebrada directamente afectado por construcción

Paso de equipo pesado por el cauce de la quebrada

# Sedimentación en quebrada

Impacto en la comunidad

## Cenizas arrastradas por las escorrentías desde Ecosystems hasta la comunidad de Tallaboa en Peñuelas



Fotos recibidas el viernes 12/02/16 por Lisandra Tarafa. Es residente de Tallaboa Encarnacion.

Dice que cree que son cenizas y de ser asi hay un mal manejo por parte del vertedero . Recuerda que ha llovido copiosamente en la zona

Esto es por la salida del cubano en direccion a tallaboa en la carretera PR 2 . La sanja colinda con el gate del vertedero en la zona donde antes era el campamento contra el gasoducto. Pasa por debajo de la autopista.

Le sugeri a Lisandra que iniciara la querella con JCA. No se si la hizo.

Aqui las fotos:

## ATTACHMENT II - RI FINDINGS AND OBSERVATIONS

| Location ID | Location/Reference Point | Latitude | Longitude | Photos | Summary of Findings | Potential Point for Soil Sampling? |
|---|---|---|---|---|---|---|
| 1 | PR-127 Box culvert in front and north of "El Velorio" Bar | 17.999516 | -66.722409 | DSCN0223 to DSCN0231 | **a.** No flow was observed. **b.** Dark colored mud and sediment accumulation was observed at the bottom of the channel. **c.** The slopes and bottom of the channel were observed covered with rip-rap. Dry and gray colored sediment was observed in the slopes of the intermittent creek channel. | Yes |
| 2 | Box Culvert (10X10 ft) north of PR-2 Loop and adjacent to private property access road closed with barbwire. | 18.00056 | -66.720369 | DSCN0232 to DSCN0246 | **a.** Light brown colored mud was observed accumulated within the box culvert. **b.** Light gray dry sediment was observed accumulated in the bottom of the intermittent creek open channel towards Road PR-2. **c.** Several segments of the open channel were observed covered with rip-rap. **d.** Significant grass growth was observed in the channel. **e.** A storm sewer pipe (approximately 12 inches) was observed in the northeast wall of the culvert. Gray colored sediment was observed accumulated within the storm sewer pipe. **f.** No flow was observed; however, a small amount of stagnant water was observed within the culvert toward the north part of the culvert in direction of the adjacent property. | Yes |
| 3 | Box culvert (10X10 ft) north of PR-2 Loop and south of box culvert described in location #2. | 18.000234 | -66.721103 | DSCN0247 to DSCN0254 | **a.** Significant accumulation of stagnant water was observed accumulated within the box culvert. A gray colored water mark was observed in the bottom part of the culvert. **b.** The intermittent creek open channel north of the culvert was observed with significant vegetative cover. However, sediment accumulation was seen accumulated on its bottom. Gray colored sediment and mud was observed in the rip rap located just before the north entrance of the culvert. | Yes. |

| Location ID | Location/Reference Point | Latitude | Longitude | Photos | Summary of Findings | Potential Point for Soil Sampling? |
|---|---|---|---|---|---|---|
| 4 | Intermittent creek open channel north of the box culvert described in location #2. | 18.000669 | -66.720082 | DSCN0255 to DSCN0256 | The intermittent creek open channel was observed with significant accumulation of sediment trapped in several rip rap sediment traps. | Yes |
| 5 | Intermittent creek open channel upstream of the sediment traps described in location #4. | 18.001057 | -66.718715 | DSCN0257 to DSCN0261 | Sediment was not observed in the bottom of the intermittent creek open channel. | No |
| 6 | Open Channel located in the back part of "El Velorio" Bar at PR-127 | 17.999468 | -66.722681 | DSCN0262 | **a.** The owner of "El Velorio" Bar, Eng. Ruben Cotto Torres (787-364-0252), stated that the flooding at the intermittent creek got significantly worse since the landfills started to receive ash. Based on Eng. Cotto statement, the sediment reaching the intermittent creek affected the drainage in the area, and caused flooding. **b.** Two (2) residences are located adjacent to the intermittent creek and "El Velorio" Bar. Based on Eng. Cotto statement, both residences were significantly impacted by accumulation of sediment containing ash. **c.** Gray colored sediment was observed in the intermittent creek open channel located behind "El Velorio" Bar. | Yes |

| Location ID | Location/Reference Point | Latitude | Longitude | Photos | Summary of Findings | Potential Point for Soil Sampling? |
|---|---|---|---|---|---|---|
| 7 | Surroundings and back yard of two (2) residences located adjacently and east of "El Velorio" Bar at PR-127. | 17.999114 | -66.722547 | DSCN0263 to DSCN0296 | **a.** The surroundings and back yards of the residences were found with accumulation of gray-colored sediment with cement like characteristics. **b.** Approximately four (4) inches of sediment accumulated inside of the residence (Residence #1) closest to "El Velorio" Bar were observed. The sediment observed inside the residence was found muddy and gray colored. A piece of dry sediment located in front and outside part of Residence #1 was found with cement-like color. Based on Eng. Cotto statement, the owners of Residence #1 abandoned the property due to the flooding issues and the sediment accumulation. A water mark of approximately 36 inches was observed in the walls of Residence #1. **c.** Several plantains plants were observed in the back yard of the residence (Residence #2) adjacent to the residence described above. The back yard of the residences and plantains plants are similar to the ones showed in the photographs presented in the Complaint. Accumulation of gray colored sediment was also observed in the surroundings of Residence #2. | Yes |
| 8 | Intermittent Creek Open Channel downstream of "El Velorio" bar towards Tallaboa Bay. | 17.999074 | -66.722871 | DSCN0297 | Gray colored sediment was observed in the bottom and slopes of the intermittent creek channel. | Yes |
| 9 | Intermittent Creek Open Channel downstream of "El Velorio" bar towards Tallaboa Bay. | 17.998927 | -66.722653 | DSCN0298 and DSCN0299 | Gray colored sediment was observed in the bottom and slopes of the intermittent creek channel. | Yes |

| Location ID | Location/Reference Point | Latitude | Longitude | Photos | Summary of Findings | Potential Point for Soil Sampling? |
|---|---|---|---|---|---|---|
| 10 | Intermittent Creek Open Channel downstream of "El Velorio" bar towards Tallaboa Bay. | 17.99876 | -66.722439 | DSCN0300 | Gray colored sediment was observed in the bottom and slopes of the intermittent creek channel. | Yes |
| 11 | Intermittent Creek Open Channel downstream of "El Velorio" bar towards Tallaboa Bay. | 17.998493 | -66.722171 | DSCN0301 | Gray colored sediment was observed in the bottom and slopes of the intermittent creek channel. | Yes |
| 12 | Area near Mr. Grimaldi Matos property (Matos 24/7 Towing Company). Intermittent Creek Open Channel towards Tallaboa Bay. | 17.997732 | -66.721836 | DSCN0302 | **a.** Mr. Grimaldi Matos, owner of a property adjacent to the intermittent creek channel stated that he was born and raised in the community and that the gray-colored sediment is not natural from the area. According to Mr. Matos statement, the sediment is related to the ash being deposited in the landfills in the area. **b.** Mr. Matos father, a fisherman of the community, stated that since the ash started reaching the intermittent creek channel around year 2014, the crabs in the area started to die. **c.** Mr. Matos' father also stated that ashes can be seen accumulated in the area of the intermittent creek channel near the Tallaboa Bay. | No |
| 13 | Tallaboa Bay approximate discharge point | 17.991667 | -66.72386 | None | Approximate location of the discharge of the intermittent creek. The Inspectors were not able to reach and inspect the area. | Yes |

**Attachment III:** RI Photo-Documentation


**DSCN0226** – Partial view of the box culvert located at Road PR-127 in front and north of "El Velorio" Bar. Dry and gray colored sediment was observed in the slopes of the channel. Dark colored mud and sediment accumulation was observed at the bottom of the channel.

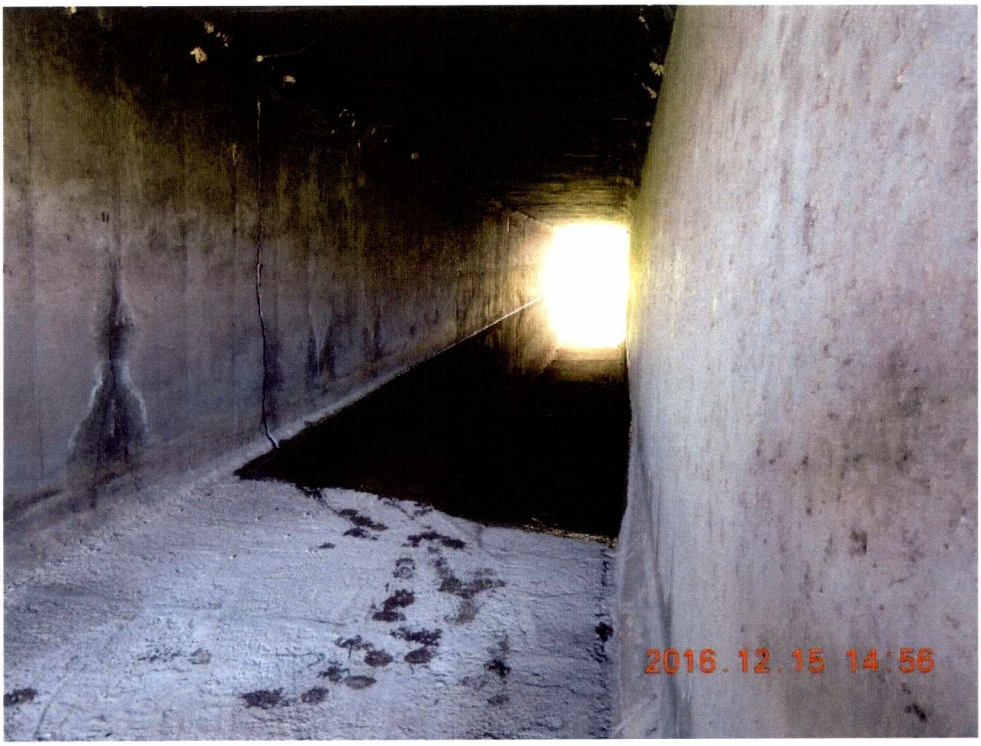

**DSCN0232** – Partial view of the Box Culvert (10X10 ft) north of Road PR-2 and adjacent to a private property access road. Light brown colored mud was observed accumulated within the box culvert.

**Attachment III:** RI Photo-Documentation


**DSCN0235 –** Partial view of the intermittent creek open channel towards Road PR-2. Light gray dry sediment was observed accumulated in the bottom of the channel.


**DSCN0240** – Partial view of the apparent storm sewer pipe (approximately 12 inches) located at the northeast wall of the culvert. Gray colored sediment was observed accumulated within the storm sewer pipe.

**Attachment III:** RI Photo-Documentation




**DSCN0247** – Partial view of the box culvert located north of Road PR-2 and south of box culvert showed in photograph DSCN0232. Significant accumulation of stagnant water was found accumulated within the box culvert. A gray colored water mark was observed in the bottom part of the culvert.


**DSCN0262** – Partial view of the intermittent creek open channel located near the back part of "El Velorio" bar at Road PR-127. Gray colored sediment was observed in the intermittent creek open channel.

**Attachment III:** RI Photo-Documentation


**DSCN0267** – Partial view of the front part of Residence #1, in which dry gray colored sediment was observed.

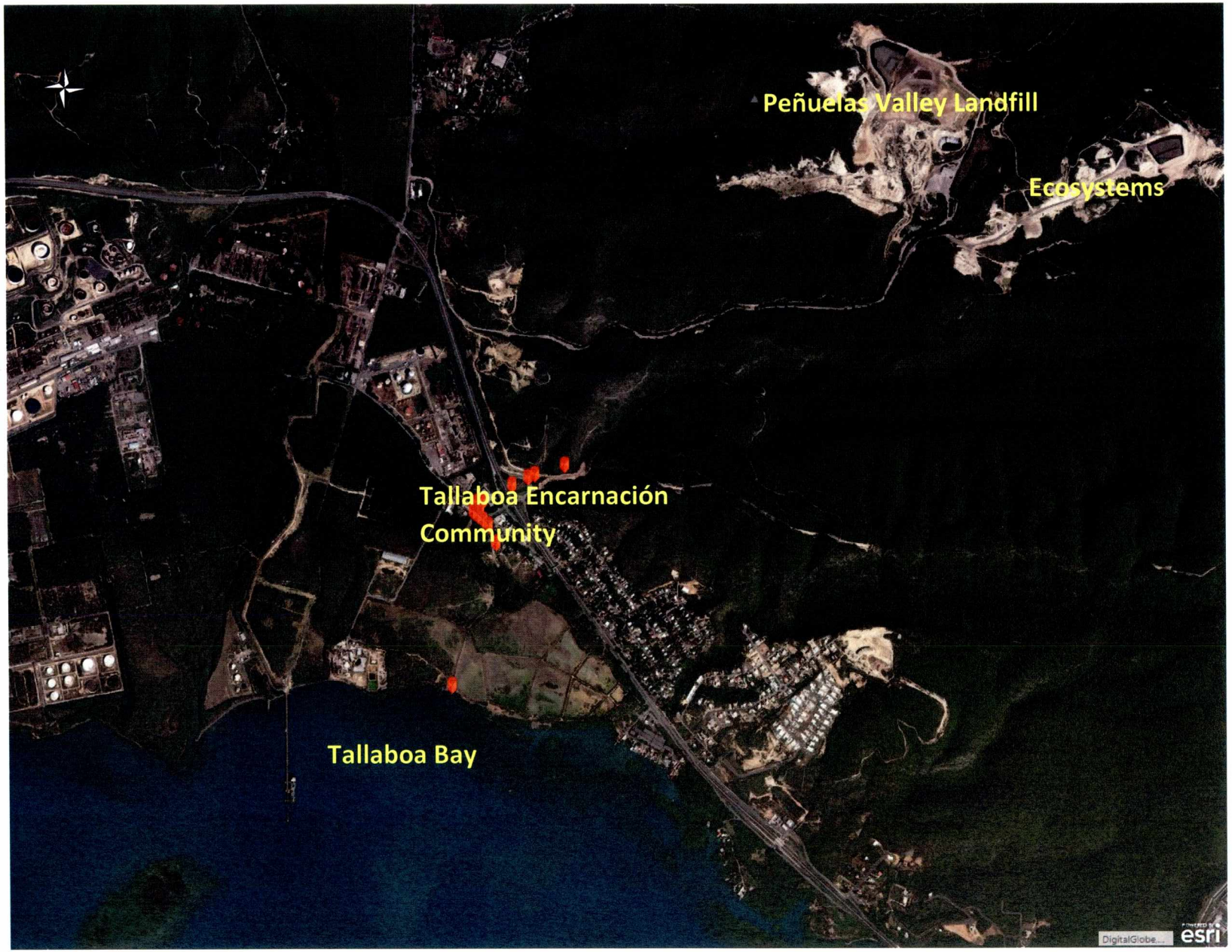

**DSCN0282** – Partial view of the inside part of Residence #1 adjacent to the intermittent creek and "El Velorio" Bar. Approximately four (4) inches of sediment accumulated inside of the residence.

**Attachment III:** RI Photo-Documentation

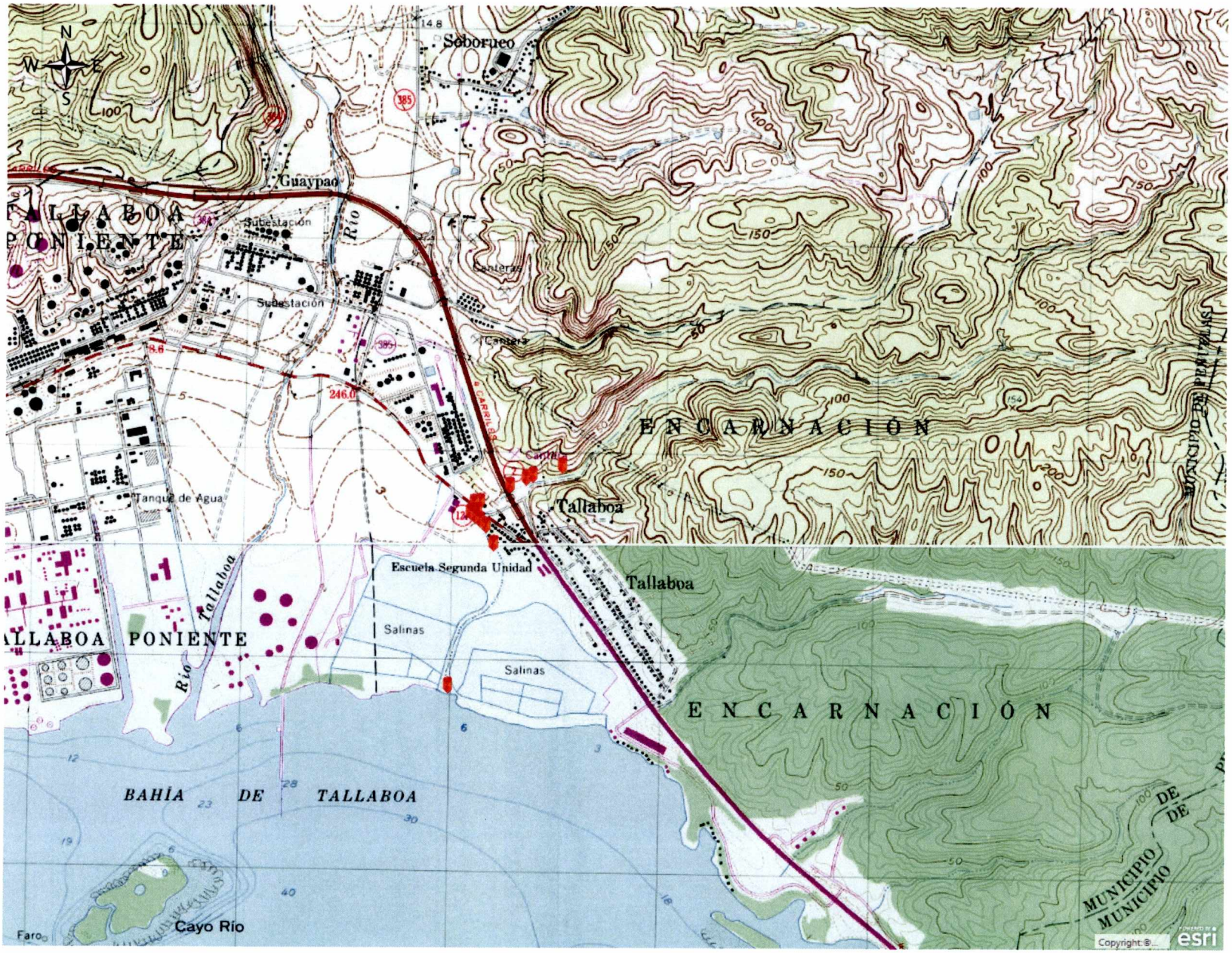

**DSCN0295** – Partial view of a piece of the sediment removed from the inside the Residence #1. The material was found muddy, wet, and had a gray color.


**DSCN0301** – Partial view of the intermittent Creek open channel downstream of "El Velorio" bar towards Tallaboa Bay. Gray colored sediment was observed in the bottom and slopes of the intermittent creek channel.

**Attachment IV:** Location Maps



**Attachment IV:** Location Maps



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